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Docket No.: 10004559-1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Robert E. Johnson et al.

Application No.: 09/845,839

Confirmation No.: 3219

Filed: April 30, 2001

Art Unit: 2161

For: SYSTEM AND METHOD FOR VALIDATION  
OF STORAGE DEVICE ADDRESSES

Examiner: F. Coby

**APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

As required under 37 C.F.R. § 41.37(a), this Appeal Brief is being submitted within two months of the Notice of Appeal filed December 15, 2006, and is in furtherance of said Notice of Appeal. The fees required under 37 C.F.R. § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF. This Appeal Brief contains items under the following headings, as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1205.02:

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**I. REAL PARTY IN INTEREST**

The real party in interest for this appeal is:

Hewlett-Packard Development Company, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### **III. STATUS OF CLAIMS**

#### **A. Total Number of Claims in Application**

There are 30 claims pending in application.

#### **B. Current Status of Claims**

1. Claims canceled: 0
2. Claims withdrawn from consideration but not canceled: 0
3. Claims pending: 1-30
4. Claims allowed: 0
5. Claims rejected: 1-30

#### **C. Claims On Appeal**

The claims on appeal are claims 1-30

#### IV. STATUS OF AMENDMENTS

A Final Office Action (hereinafter *Final Office Action*) rejecting the claims of the present application was mailed on October 18, 2006. The *Final Office Action* introduced new grounds of rejection and stated that such grounds were necessitated because of Appellant's amendment. *Final Office Action* at p. 2. However, the amendment referred to by the Examiner merely deleted a few words from the preamble of claims 1, 21, and 29 in order to overcome an indefiniteness rejection raised in a prior action. See *Amendment of July 27, 2006* at p. 7. Appellant believes that these amendments were minor in nature, and clearly did not change the scope of the claims. Accordingly, Appellant has filed a petition requesting to have the finality of the *Final Office Action* vacated as premature under 37 C.F.R. § 1.81.

In addition, Appellant filed a Notice of Appeal, which this Appeal Brief supports. The claims on appeal are the same as those rejected in the *Final Office Action*. A listing of the claims on appeal is provided under the "Claims Appendix" heading of this Appeal Brief.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in the independent claim involved in the appeal, referring to the Specification by page and line number and to the Drawings by reference characters, as required by 37 C.F.R. § 41.37. As such, each element of the claims is identified by a corresponding reference to the Specification and Drawings, where applicable. However, citation to passages in the Specification and Drawings does not imply that limitations from the Specification and Drawings should be read into the corresponding claim element.

According to one claimed embodiment, such as that of independent claim 1, a method comprises storing discovery information relating to a storage device (*see e.g.*, Specification at p. 14, ln. 19—p. 16, ln. 2; Fig. 7, items 701 and 702), querying the storage device for device identification information (*see e.g.*, Specification at p. 16, lns. 3-15; Fig. 7, item 703), and comparing at least a portion of returned device identification information to at least a portion of the stored discovery information (*see e.g.*, Specification at p. 17, lns. 1-6; Fig. 7, item 705).

According to another claimed embodiment, such as that of independent claim 21, a system comprises means for storing discovery information for a storage device (*see e.g.*, Specification at p. 14, ln. 19—p. 16, ln. 2; Fig. 7, items 701 and 702), means for querying the storage device for device identification information (*see e.g.*, Specification at p. 16, lns. 3-15; Fig. 7, item 703), and means for comparing at least a portion of device identification information received in response to the query to at least a portion of the stored discovery information (*see e.g.*, Specification at p. 17, lns. 1-6; Fig. 7, item 705).

According to yet another embodiment, such as that of independent claim 29, a system comprises at least one host system, where at least one storage device is embedded in or coupled to each of the at least one host system (*see e.g.*, Specification at p. 6, lns. 1-15; Fig. 1, items 101-1 and 102-1) and where each of the at least one host system stores information relating to the at least one storage device embedded in or coupled thereto (*see e.g.*, Specification at p. 14, ln. 19—

p. 16, ln. 2; Fig. 7, items 701 and 702), and at least one host agent process, where each of the at least one host agent process resides on a respective host system of the at least one host system (*see e.g.*, Specification at p. 6, lns. 1-15; Fig. 1, item 106-1) and where each of the at least one host agent process is operable to query the at least one storage device embedded in or coupled to the host system on which the host agent process resides for device identification information (*see e.g.*, Specification at p. 16, lns. 3-15; Fig. 7, item 703), as well as to compare information returned by the at least one storage device to at least a portion of discovery information stored for the at least one storage device at the host system to which the at least one storage device is coupled (*see e.g.*, Specification at p. 17, lns. 1-6; Fig. 7, item 705).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Burton et al. (U.S. Patent No. 6,393,535, hereinafter *Burton*) in view of Kato et al. (U.S. Patent No. 5,721,722, hereinafter *Kato*).



## VII. ARGUMENT

Appellant respectfully traverses the outstanding rejections of the pending claims, and requests that the Board reverse these rejections in light of the remarks contained herein.

### A. Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Burton* in view of *Kato*. *Final Office Action* at page 3. Appellant traverses the rejection and asserts that the claims are allowable, at least, for the reasons stated below.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the applied reference. *See In re Vaeck* 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. *In re Merck and Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Finally, the applied reference must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Without conceding the second criterion, Appellant asserts that the Examiner's rejections do not satisfy the first and third criteria.

#### 1. Independent Claims 1, 21, and 29

##### a. Insufficient Motivation

Appellant believes that the rejection of claims 1, 21, and 29 should be reversed because there is insufficient motivation to combine the storage device system described in *Burton* with the factory automation system of *Kato*. Appellant respectfully points out that *Burton* discloses a system for operating storage devices disposed in a computer network. *See Burton* at Abstract. Meanwhile, *Kato* discloses a controller that manages devices operating in a factory assembly line. *See Kato* at col. 1, lns. 6-17. In other words, whereas *Burton* applies specifically to hard disk drives, *Kato* applies generally to robots. *Compare* *Burton* at col. 29-40 and col. 4, lns. 12-

14 *with Kato* at col. 1, Ins. 6-17. Simply put, there is no reason why a person of ordinary skill in the art would be motivated to combine the storage system of *Burton* with the factory automation system of *Kato*.

Nonetheless, the Examiner states that the motivation for the combination is:

to have enhanced the versatility of the controllers in *Burton*; thus, permitting *Burton* to provide a controller and data processing environment which permits easy collection of response data from a plurality of different types of upper or lower controllers without complicating a user program.

*Final Office Action* at p. 5. In response, Appellant respectfully asserts that the proposed combination would not “enhance the versatility” of *Burton*. Unlike *Kato*, *Burton* does not use “upper” and “lower” controllers. *Burton* at col. 1, Ins. 40-48. In fact, *Burton*’s controllers are redundant hardware components that operate at the same level. See *Burton* at col. 1, Ins. 40-48; col. 4, Ins. 12-31; Fig 1, items 14a, b. Moreover, *Burton* does not need to provide for the “collection of response data from a plurality of different types of upper or lower controllers,” as stated by the Examiner, because, again, *Burton*’s controllers are redundant components that perform identical functions. *Id.*

Furthermore, Appellant respectfully points out that *Kato* is relied upon by the Examiner primarily for disclosing the use of “comments.” See *Final Office Action* at p. 4. According to *Kato*, each device in its assembly line is assigned an alias by a user in advance of its operation. See e.g., *id.* at col. 15, Ins. 37-41; col. 15, ln. 63—col. 16, ln. 2. The Examiner has not given any indication of how *Kato*’s teachings can be integrated into *Burton*’s system, if at all. See *Final Office Action* at p. 4. Even assuming, *arguendo*, that *Kato*’s use of comments can be added into *Burton*, Appellant respectfully asserts that such addition would in fact be detrimental to *Burton* because it would require a user to associate an alias with each element of *Burton*’s storage subsystem before its actual use.

In sum, there is insufficient motivation to combine *Burton* with *Kato*, and thus the proposed combination of references is improper. Accordingly, Appellant respectfully requests that the Board reverse the Final Rejection and remand this application for allowance.

b. Lack of All Claimed Elements

Claim 1 recites, in part, “comparing at least a portion of returned device identification information to at least a portion of said stored discovery information.” Claim 21 recites, in part, “means for comparing at least a portion of device identification information received in response to said query to at least a portion of said stored discovery information.” Claim 29 recites, in part, “at least one host agent process [] operable to . . . compare information returned by said at least one storage device to at least a portion of discovery information stored for said at least one storage device . . . .” The Examiner admits that *Burton* does not disclose these elements, and relies solely upon *Kato* as teaching or suggesting the aforementioned elements. *Final Office Action* at p. 3. At the passage cited by the Examiner, *Kato* discloses, in relevant part:

[a] first control unit [that] includes a specifier which specifies comments which are compared to the comments stored in the device information setter to specify from which of the plurality of upper or lower controllers the data is to be collected.

*Kato* at col. 4, lns. 36-40. In response, Appellant respectfully asserts that the comments specified in *Kato* are not “returned device identification information.” At least for this reason, *Kato* does not teach or suggest comparing returned device identification information with stored discovery information.

More specifically, *Kato*’s comments are merely aliases for devices that are arbitrarily created or specified by a user during the configuration of an assembly line. See *Kato* at col. 15, lns. 42-54; Figure 23. Furthermore, *Kato* describes in various passages that its comments are “registered by a user in advance.” See e.g., *id.* at col. 15, lns. 37-41; col. 15, ln. 63—col. 16, ln. 2. Meanwhile, the claimed “returned device identification information” is obtained upon the querying of a storage device. Thus, although *Kato* may disclose comparing specified comments

with stored comments, it does not teach or suggest comparing returned device identification information with stored discovery information, as recited in the claims.

Neither *Burton* with *Kato* teach or suggest the aforementioned elements. Therefore, the combination of *Burton* with *Kato*, even if proper, does not teach or suggest every element recited in claims 1, 21, and 29. Accordingly, Appellant respectfully requests that the Board reverse the Final Rejection and remand this application for allowance.

## **2. Dependent Claims 2-20, 22-28, and 30**

Dependent claims 2-20 depend either directly or indirectly from claim 1, thus inheriting every limitation of that independent claim. Dependent claims 22-28 depend either directly or indirectly from claim 21, thus inheriting every limitation of that independent claim. Dependent claim 30 depends from claim 29, thus inheriting every limitation of that independent claim. Accordingly, it is respectfully submitted that dependent claims 2-20, 22-28, and 29 are patentable at least for the reasons discussed above.

## **B. Conclusion**

Appellant respectfully asserts that the *Final Office Action* fails to provide sufficient or proper motivation for combining *Burton* with *Kato* to reach the limitations of the pending claims. In addition, the combination of *Burton* with *Kato*, even if proper, does not teach or suggest every claimed element. Therefore, Appellant respectfully asserts that for at least the above reasons claims 1 through 30 of the present application are patentable over the 35 U.S.C. § 103(a) rejection of record. Accordingly, Appellants respectfully request that the Board reverse the Final Rejection and remand this application for allowance.

Dated: February 15, 2007

Respectfully submitted,

By 

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**CLAIMS APPENDIX**

1. (Previously Presented) A method comprising:  
storing discovery information relating to a storage device;  
querying said storage device for device identification information; and  
comparing at least a portion of returned device identification information to at least a portion of said stored discovery information.
2. (Original) The method of claim 1 wherein said at least a portion of said stored discovery information includes device and host bus adapter information.
3. (Original) The method of claim 1 wherein said stored discovery information is obtained through at least one small computer system interface (SCSI) inquiry.
4. (Original) The method of claim 2 wherein said stored discovery information is obtained through at least one element selected from the group consisting of:  
at least one system file;  
at least one system registry; and  
combinations thereof.
5. (Original) The method of claim 2 wherein said stored discovery information is obtained through at least one element selected from the group consisting of:  
operating system kernel application programming interface call;  
host bus adapter device driver library application programming interface; and  
some combination thereof.
6. (Original) The method of claim 1 wherein said at least a portion of said returned device identification information includes Product ID, Vendor ID, and Product Revision information.

7. (Original) The method of claim 1 wherein said returned device identification information includes standard device inquiry information.

8. (Original) The method of claim 1 wherein said stored discovery information includes device address information.

9. (Original) The method of claim 8 wherein said device address information includes claimed address information; and wherein said method further comprises:  
determining claimed address information for said storage device; and  
comparing said determined claimed address information to said stored claimed address information.

10. (Original) The method of claim 9 wherein said method further comprises:  
flagging said stored discovery information if said determined claimed address information does not match said stored claimed address information.

11. (Original) The method of claim 9 wherein said stored discovery information further includes serial number information for said storage device, and wherein said method further comprises:  
querying said storage device for serial number information for said device; and  
comparing said serial number information received in response to said serial number information query to said stored serial number information.

12. (Original) The method of claim 9 wherein said method further comprises:  
querying said storage device for serial number information for said device; and  
accepting said stored device address information as valid if an error is returned in response to said query.

13. (Original) The method of claim 1 wherein said querying includes at least one small computer system interface (SCSI) inquiry.

14. (Original) The method of claim 1 wherein said method further includes flagging said stored discovery information if said at least a portion of said returned information does not match said at least a portion of said stored discovery information.

15. (Original) The method of claim 14 wherein said method further comprises:  
deleting or updating said stored discovery information if said stored discovery information is flagged.

16. (Original) The method of claim 15 wherein said storing discovery information includes storing discovery information on a host system and a storage management system; and wherein said deleting or updating said stored discovery information includes deleting or updating said discovery information stored at said host system and at said storage management system.

17. (Original) The method of claim 16 wherein said deleting or updating said stored discovery information stored at said host system further comprises:  
transmitting an event to said storage managements system requesting said storage management system to delete or update said discovery information stored at said storage management system.

18. (Original) The method of claim 15 wherein said method further comprises:  
storing said returned information as a new device.

19. (Original) The method of claim 18 wherein said method further comprises:  
communicating an event requesting the addition of said returned information or an update of previous information using said returned information.

20. (Original) The method of claim 18 wherein said method further comprises:  
preventing communication between a storage management system and said device during said storing said returned information as a new device.

21. (Previously Presented) A system comprising:  
means for storing discovery information for a storage device;



means for querying said storage device for device identification information; and  
means for comparing at least a portion of device identification information received in response to said query to at least a portion of said stored discovery information.

22. (Original) The system of claim 22 wherein said discovery information includes device address information.

23. (Original) The system of claim 22 wherein said device address information includes claimed address information for said storage device; and wherein said system further comprises:

means for determining claimed address information for said device;  
means for comparing said determined claimed address information to said stored claimed address information; and  
means for flagging said stored discovery information if said determined claimed address information does not match said stored claimed address information.

24. (Original) The system of claim 23 wherein said discovery information further includes serial number information for said storage device, and wherein said system further comprises:

means for querying said storage device for serial number information for said storage device;  
means for comparing said serial number information received in response to said serial number information query to said stored serial number information; and  
means for flagging said stored discovery information if said received serial number information does not match said stored serial number information.

25. (Original) The system of claim 23 wherein said system further comprises:  
means for querying said storage device for serial number information for said device; and  
means for accepting said stored device address information as valid if an error is returned in response to said query for serial number information.

26. (Original) The system of claim 21 wherein said system further comprises:  
means for flagging said stored discovery information if said at least a portion of said  
received information does not match said at least a portion of said stored discovery information.

27. (Original) The system of claim 26 wherein said system further comprises:  
means for deleting or updating said stored discovery information if said stored discovery  
information is flagged.

28. (Original) The system of claim 27 wherein said system further comprises:  
means for preventing communication between a storage management system and said  
storage device when said stored discovery information is being deleted or updated.

29. (Previously Presented) A system comprising:  
at least one host system, wherein at least one storage device is embedded in or coupled to  
each of said at least one host system; and wherein each of said at least one host system stores  
information relating to said at least one storage device embedded in or coupled thereto; and  
at least one host agent process, wherein each of said at least one host agent process  
resides on a respective host system of said at least one host system;  
wherein each of said at least one host agent process is operable to query said at least one  
storage device embedded in or coupled to said host system on which said host agent process  
resides for device identification information, as well as to compare information returned by said  
at least one storage device to at least a portion of discovery information stored for said at least  
one storage device at said host system to which said at least one storage device is coupled.

30. (Original) The system of claim 29 wherein said at least one host agent process  
queries said at least one storage device during system start up or doing a discovery polling  
period.

**EVIDENCE APPENDIX**

No evidence pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or entered by or relied upon by Appellee is being submitted.

**RELATED PROCEEDINGS APPENDIX**

No related proceedings or copies of decisions in related proceedings are being submitted.